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Pavel, S. [RU/RU]; Ulica Magnitogorskaya, 22 Kv. 15, Vladivostok 690068 (RU). SINKOV, Gennadi, V. [RU/RU]; Novokurkinskoe shosse -D-25,, Kor 2, Kv.55, 125466 Moscow (RU).

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(74) Agents: **PISTOLESI, Roberto** et al.; Dragotti & Associati Srl, Vicolo Campana, 3, I-31100 Treviso (IT).

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(71) Applicant (*for all designated States except US*): **BRETON SPA** [IT/IT]; Via Garibaldi, 27, I-31030 Castello di Godego (Treviso) (IT).

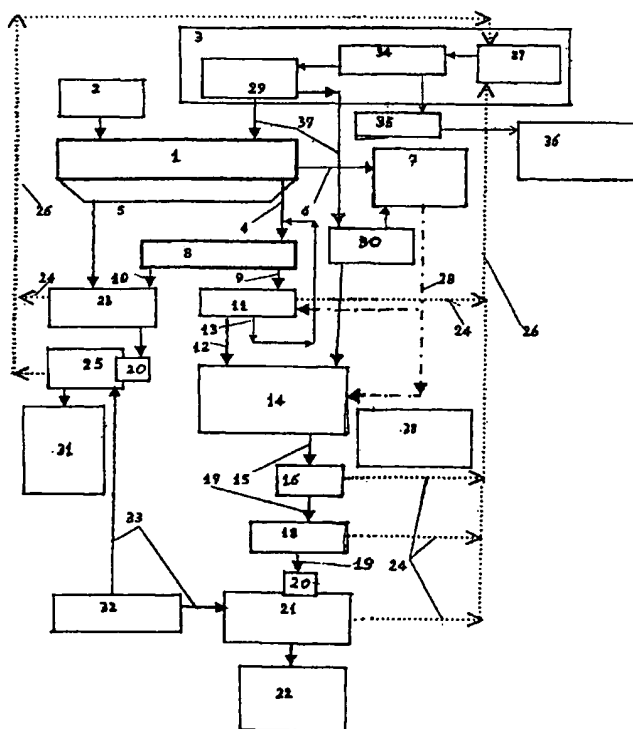
(72) Inventors; and

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(75) Inventors/Applicants (*for US only*): **GORDIENKO,**

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(54) Title: **PROCESS FOR THE PRODUCTION OF TITANIUM DIOXIDE**



Schematic diagram of the facility

(57) **Abstract:** It is disclosed a process for the production of titanium dioxide comprising the following steps: (a) a titanium ore containing iron, preferably ilmenite, is reacted with an aqueous NH_4F solution; (b) the aqueous suspension thus obtained is filtered with consequent separation of a sludge fraction, which contains ammonium fluoroferrates, and a filtrate fraction, which contains ammonium fluorotitanates; (c) the filtrate fraction thus obtained is subjected to an hydrolysis reaction; (d) the thus-obtained solid component is subjected to a thermal hydrolysis reaction. The plant and the reactors for performing the above process are also disclosed.



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